

Disclosure and health-seeking behaviour following intimate partner violence before and during pregnancy in Flanders, Belgium: A survey surveillance study

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Received 15 March 2006; received in revised form 26 March 2007; accepted 4 April 2007

Abstract

Objectives: The objectives were to estimate the prevalence of physical and sexual intimate partner violence (IPV) among a regional sample of the general obstetric population as the lifetime prevalence, as the 1-year period prevalence before pregnancy, and as the prevalence during the index pregnancy; to assess the rates of disclosure and help-seeking behaviour with IPV; and to determine the acceptability of screening for IPV.

Study design: A multi-centred survey surveillance study was carried out among pregnant women attending five large hospitals in the province of East Flanders, Belgium as a regional probability sample of the general obstetric population. Data were collected through an anonymous, written questionnaire that included the Abuse Assessment Screen and additional questions on the circumstances of the most recent episode of physical or sexual violence, on disclosure and help-seeking behaviour, on reporting assault to the police, and on the acceptability of routine screening for IPV.

Results: The sampling frame consisted of 1362 women who received the questionnaire at the antenatal service during a 2-month study period, of which 537 (mean age 29.4 years, S.D. 4.09) returned the envelope (response rate 39.4%). The lifetime prevalence of IPV was estimated to be 10.1% (95% CI 7.7–13.0%) and the period prevalence of IPV during pregnancy and/or in the year preceding pregnancy 3.4% (95% CI 2.1–5.4%). There was a significant difference in the reported lifetime prevalence of IPV between women attending with a partner and those who came to the prenatal visit unattended by their partner in particular (6.8% versus 13.9%, $p = 0.010$). Overall, only 19.2% (23 out of 120) and as few as 6.6% (4 out of 61) of the victims of physical and sexual abuse respectively sought medical care by consulting a general practitioner, gynaecologist, or an emergency department. Routine screening for IPV by a general practitioner or gynaecologist was found to be largely acceptable.

Conclusions: In our highly medicalised society, women experiencing partner violence rarely disclose abuse to the widely available health care services, unless they are directly asked about it, which appears an acceptable practice. Hence, there is a definite need to improve women's awareness regarding abuse and their help-seeking behaviour at a public health level.

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Keywords: Intimate partner violence; Pregnancy; Abuse; Health care provider

1. Introduction

Intimate partner violence (IPV) is defined as physical, psychological, economic or sexual coercion of one partner in a relationship by the other [1]. As a leading cause of physical injury [2], mental illness [3], adverse pregnancy outcome

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[4–6] and maternal death [7,8], domestic violence is not so much an emerging women's health issue, but rather a continuing hidden epidemic. Lifetime prevalence estimates of partner-inflicted harm to women range from 10 up to 69% [9], while partner abuse during pregnancy in particular has consistently been found to occur in 3–8% of pregnancies [10].

As a straightforward corollary, systematic screening for intimate partner abuse by health care workers has been advocated by several authoritative bodies in the UK and the USA [11–16], though challenged as an approach with unproven safety by some [17,18]. It has been acknowledged, however, that screening for domestic violence is not a routine part of most medical visits [19] as we have recently documented in our health care setting [20].

Apart from a physician's willingness to screen, women's preparedness to disclose abuse is obviously the other key element in the screening process. Basically, recognition of abuse, the decision to seek help, and selecting a source of support are the basic steps in help-seeking for women with IPV, with individual, interpersonal and socio-cultural factors all influencing the decision-making at each of these steps [21]. We therefore aimed to assess not only the prevalence of IPV, but also women's preparedness to disclose abuse and their help-seeking behaviour in a socio-economic setting, which is characterised by a health care system that is generally considered to be highly accessible in terms of availability, physical accessibility and affordability; by high rates of health care utilisation; and by a high level of medicalisation.

2. Materials and methods

2.1. Study design

We performed a multi-centred, survey surveillance study on IPV among pregnant women attending five large hospitals in the province of East Flanders, Belgium as a regional probability sample of the general obstetric population, between September 1, 2003 and October 31, 2003. In Flanders over 98% of pregnant women visit a gynaecologist for a prenatal follow-up and over 95% of gynaecologists are affiliated to a hospital. Initially, participating obstetricians were asked to screen for IPV with the Abuse Assessment Screen (AAS) [22] according to CDC and ACOG guidelines [12]. However, as most gynaecologists were reluctant to launch direct questions about abuse and hence were unwilling to perform such AAS-based screening, the study design was shifted towards a written questionnaire-based survey. The study was approved by the Ethics Committee of the Ghent University Hospital.

2.2. Questionnaire

The questionnaire was developed by adopting the AAS in full [22] and further extended with a series of questions

about (1) the most recent episode of physical/sexual assault to assess coping behaviour, health-seeking behaviour and disclosure of abuse to legal services, and (2) about attitudes towards IPV screening and hence the patient's preparedness to disclose abuse.

The questionnaire was developed in Dutch, and included an English-to-Dutch translation of the AAS tool [22] without back translation.

During the study period, all Dutch-speaking women who visited a gynaecologist for a prenatal follow-up at one of the five collaborating centres were offered a stamped envelope with the questionnaire and an informed consent form. Women were asked to complete the questionnaire at home and to return it anonymously by mail to the principal investigator. To distinguish between women who attended with or without a partner, the envelopes were marked differently.

2.3. Pilot study

A pilot study was performed in one of the participating hospitals (Ghent University Hospital) over a 2-week period, resulting in a response rate of 52.3% (56 out of 107). The overall study set-up was considered feasible and acceptable, and therefore the methodology was left unchanged in the eventual study and the pre-test results were included in the final analysis.

2.4. Outcome measures

The primary outcome variables were the lifetime prevalence of physical and sexual violence, the lifetime prevalence of IPV, the period prevalence of IPV during pregnancy and the period prevalence of IPV in the 12 months preceding pregnancy.

The term "intimate partner violence" generally refers to physical, sexual, or psychological harm by a current or former partner or spouse [1]. In this survey we specifically addressed physical and sexual violence, and hence we did not account for psychological or emotional violence as such. Accordingly, IPV is herewith defined as physical violence and/or sexual violence, including threats of violence.

To assess these outcomes the following CDC definitions were adopted [1]: (a) *physical violence* is defined as the intentional use of physical force with the potential to cause death, disability, injury, or harm, and (b) *sexual violence* is defined as the use of physical force to compel a person to engage in a sexual act against her will, whether or not the act is completed; as an attempted or completed sex act involving a person who is unable to understand the nature or condition of the act, to decline participation, or to communicate unwillingness to engage in the sexual act; and as otherwise abusive sexual contact.

The terms abuse, assault, and violence are used interchangeably throughout the manuscript, but consistently refer to the concepts herewith defined.

The main secondary outcome measures related to disclosure and health-seeking behaviour following physical or sexual assault and to women's attitudes towards routine screening for IPV.

2.5. Statistical considerations

We calculated that in order to obtain a reliable regional prevalence estimate of IPV during pregnancy, i.e. accounting for an estimated prevalence of 5.0%, an $\alpha = 0.05$ significance level, precision of 1.5%, and a response rate of 50.0%, 1600 women were required to be invited to participate in the study.

Ordinary Chi-squared tests, or Fisher's Exact test when appropriate, were used to assess the statistical significance of differences in rates or ratios of events in pairwise comparisons. Differences in means were explored using the independent samples t-test. Differences were considered statistically significant if the two-tailed probability of a type I error was <0.05 .

All data were entered into EpiInfo v. 6.04 and all statistical analyses were performed with SPSS v12.0 (Chicago, IL, USA).

3. Results

3.1. Population sample

Of the 1600 questionnaires that were distributed to the participating centres, a total of 1362 questionnaires were eventually handed over to attending patients during the 2-month study period. Five hundred and thirty seven women returned the envelope, corresponding to an overall response rate of 39.4% and to a precision of 0.185 for the population proportion relative to the background population. Ninety-two percent of the participants were living in the target area (East Flanders) with a representative distribution between women residing in urban and rural areas.

There was statistically significant between-centre variability in response rates ($\chi^2 = 92.05$, $p < 0.001$), which ranged from 24.1 to 60.6%. However, there was no statistically significant difference in centre-specific prevalence rates, nor did we observe a correlation between centre-specific response and prevalence rates.

We observed a significantly higher response rate among women (42.7%) who attended with their partner (307 out of

719) compared with those (35.8%) who came without a partner to the antenatal service (230 out of 643; $p = 0.01$).

Age distribution and mean age of the women who reported a history of abuse (29.8, S.D. 4.8) was not significantly different from participants without a history of abuse (29.3, S.D. 3.8) ($p = 0.33$) and therefore no effect of differential age on lifetime prevalence measures is expected. Teenage pregnancies (0.74%) were clearly underrepresented in our survey while the few cases included all reported a history of abuse.

3.2. Lifetime prevalence of physical, sexual, and intimate partner violence

One hundred and twenty women reported experiencing some kind of physical violence at least once during their lifetime (Table 1), corresponding to a lifetime prevalence of physical violence of 22.4%. A history of physical violence more than 5 years prior to the survey was primarily associated with domestic violence involving parents and siblings (54.3%) and to a lesser extent with IPV (18.6%). When physical violence had occurred within the last 5 years, IPV was involved in 58.3% of the cases.

In this general obstetric population 11.2% of the women (60/537) have been a victim of sexual violence at least once during their lifetime (Table 1), with the vast majority of women (93.9%) reporting the most recent sexual assault at an age of >18 years. Recent sexual violence, within the last 5 years, was almost exclusively IPV (87.6%), but less so when sexual assault had occurred more than 5 years ago (22.2%).

Overall, in this regional probability sample we obtained an estimated lifetime prevalence of IPV of 10.06% (95% CI: 7.71–12.99%; Table 2).

3.3. Violence in pregnancy

Partner abuse pertaining to the index pregnancy was reported by 2.2% of participants (12 out of 537), while 2.4% of survey participants (13 out of 537) revealed IPV in the year prior to pregnancy (Table 2). IPV preceding pregnancy continued into pregnancy in about half (53.8%) of the cases (7 out of 13).

3.4. Attendance with or without partner

Overall, survey participants who attended the antenatal clinic unaccompanied by their partner reported a history of

Table 1
Prevalence of physical and sexual violence: type of violence

Type of violence	Lifetime (%)	Twelve months before pregnancy (%)	During pregnancy (%)
Physical violence only	16.4 (88/537)	2.6 (14/537)	2.4 (13/537)
Sexual violence only	5.2 (28/537)	0.9 (5/537)	0.2 (1/537)
Physical and sexual violence	6 (32/537)	0.4 (2/537)	0.4 (2/537)
Physical and/or sexual violence	27.6 (148/537)	3.9 (21/537)	3.0 (16/537)
No answer	0.7 (4/537)	0.6 (3/537)	1.7 (9/537)

Table 2

Prevalence of physical and sexual domestic violence: by partner or family

	Physical or sexual violence	Physical or sexual violence by family		Physical or sexual violence by partner	
	% of all women (n/N)	% of all victims (n)	% of all women (n/N)	% of all victims (n)	% of all women (n/N)
Lifetime	27.6 (148/537)	30.4 (45/148)	8.4 (45/537)	36.5 (54/148)	10.1 (54/537)
12 months before pregnancy	3.9 (21/537)	9.5 (2/21)	0.4 (2/537)	61.9 (13/21)	2.4 (13/537)
During pregnancy	3.0 (16/537)	6.2 (1/16)	1.9 (1/537)	75 (12/16)	2.2 (12/537)

Table 3

Health and support-seeking behaviour

	Most recent episode of physical assault (%) (n = 120)	Most recent episode of sexual assault (%) (n = 61)
Sought medical care	19.2 (23/120)	6.6 (4/61)
Reported to the police	17.5 (21/120)	6.6 (4/61)
Talked about it	55.0 (66/120)	47.5 (29/61)
With friends	35.0 (42/120)	34.4 (21/61)
With family member	33.3 (40/120)	26.2 (16/61)
With general practitioner	12.5 (15/120)	4.9 (3/61)
With psychologist	6.7 (8/120)	11.5 (7/61)
With social assistant	3.3 (4/120)	4.9 (3/61)
With gynaecologist	3.3 (4/120)	3.3 (2/61)
With caregiver at emergency ward	3.3 (4/120)	1.6 (1/61)

abuse significantly more often (32.6%) than women who came with their partner (24.2%; $p = 0.048$), and this difference was even more pronounced for the lifetime prevalence of IPV, in particular (13.9% versus 6.8%, $p = 0.010$).

3.5. Health-seeking behaviour

Health-seeking behaviour and reporting violence was assessed through a series of questions on how women dealt with an abusive act in terms of seeking health care, seeking emotional/psychological support, and charging complaints, as displayed in Table 3.

Merely 19.2% (23 out of 120) and as few as 6.6% (4 out of 61) of the victims of physical and sexual abuse, respectively pursued medical care by consulting a general practitioner, gynaecologist, or an emergency department. Similarly, less than 1 in 5 women (21 out of 120 or 17.5%) reported physical violence and less than 1 in 10 women reported sexual assault to the police.

Table 4

Attitude towards being asked about intimate partner violence

Asking questions about violence	Considered as negative		Considered as neutral		Considered as positive	
	Ever assaulted (%)	Never assaulted (%)	Ever assaulted (%)	Never assaulted (%)	Ever assaulted (%)	Never assaulted (%)
By general practitioner	12.9 (19/147)	9.1 (35/383)	36.7 (54/147)	30.3 (116/383)	50.3* (74/147)	60.6* (232/383)
By gynaecologist	16.3 [†] (24/147)	7.6 [†] (29/382)	29.9 (44/147)	28.3 (108/382)	53.7 [‡] (79/147)	64.1 [‡] (245/382)
In this questionnaire	1.4 (2/147)	1.0 (4/382)	12.9 (19/147)	16.2 (62/382)	85.7 (126/147)	82.7 (316/382)

For the items indicated, there was a statistically significant difference in attitude between women with and without a history of abuse (* $p = 0.04$, $^{\dagger}p = 0.004$, $^{\ddagger}p = 0.04$). For all other items displayed in the table there was no such difference.

3.6. Attitude of women towards being asked about violence

In order to assess the attitude of women towards being asked about exposure to violence as part of routine medical history-taking, survey participants completed three distinct questions, i.e. their attitude towards being directly asked about a history of abuse by their general practitioner, by their gynaecologist, or through a questionnaire similar to the survey instrument (Table 4).

As shown in Table 4, the vast majority of women approved or, if not, did not disapprove of routine questioning regarding abuse by their GP or gynaecologist. However, women with a history of abuse were overall slightly but significantly less in favour of direct questioning by their GP or by their gynaecologist.

4. Comment

From a questionnaire-based surveillance study among pregnant women close to their 30s we obtained lifetime prevalence estimates of 22.3% and of 11.2% for physical and sexual violence, respectively. Overall, IPV occurred in one in ten women (10.1%, 95% CI 7.7–13.0%) and in about one in 30 women (3.4%, 95% CI 2.1–5.4%), respectively during pregnancy and/or in the year preceding pregnancy.

In a comprehensive WHO review prevalence estimates of IPV have previously been reported from a wide variety of settings, ranging from 10 to 69% [9]. It must be acknowledged, however, that vast differences in definitions applied, populations covered, study designs and other methodological aspects actually prevent any proper comparison among most studies. If anything, we believe that the primary goal of studies estimating intimate partner prevalence should be to aim at good quality data reflecting the nature and extent of

abusive acts in a given socio-cultural context, to allow for a coordinated societal and health care response to the widespread health threat of partner abuse.

Indeed, the most striking finding in our study was beyond any doubt that, while physical and sexual violence affecting women proved a particularly common affliction, only a very small proportion of women pursue any medical care following a violent attempt, even in cases of severe assault, like rape. Peschers et al. recently reported very similar findings in a single-centre study from Germany [23]. Since we further documented, as reported before [24,25], that most women actually favour not objecting to being screened in a routine manner for ongoing or recent abuse, it therefore appears as if women experiencing partner violence rather manage to disclose abuse if they are primed, than to do so spontaneously. Almost half of the study participants did not disclose the abuse they experienced at all until the survey took place, with the questionnaire-based form showing almost perfect acceptability. This in turn, may prove particularly useful to tailor an appropriate health care response, thereby also aiming at increasing women's help-seeking behaviour, as has been exquisitely modelled by Liang et al. [21].

We recognize that our study had several limitations. First of all, less than half of the patients within the sampling frame actually participated in the survey. The response rate obtained (39.4%) still allows for a precision of 0.185 in estimating the prevalence measures for the population proportion in this regional probability sample of the general obstetric population. Nonetheless, it must be acknowledged that owing to the study design, recruitment and participation bias is likely to have affected the internal validity of our results. In particular, we do not know whether or not women with a history of abuse were more likely to participate, although victimised women may have been more likely to be underrepresented, leading to underreporting [26]. This further complicates the interpretation of our results on women's preparedness to disclose abuse in a routine manner. Furthermore, while it is reassuring that the vast majority of women did not oppose routine screening, it should also be acknowledged that women in our study may have been especially likely to have a positive attitude, since they also agreed to participate in the study.

The presence of the partner while attending the antenatal service clearly also impinged on the self-reported rates of violence, even in this anonymous questionnaire-based survey. This may have resulted from increased partner attendance with women in violent relationships as a "husband-in-control" bias, leading to underreporting, but also from higher attendance of the more dedicated partners as a "happy couple" participation bias. These issues certainly warrant further research to improve the sensitivity of screening.

At the outset we – along with the independent Institutional Review Board – considered the "open" screening approach safe, as it was presented to women

with or without a partner by their gynaecologists as a general survey for scientific purposes, which generated strictly anonymous results not returned to the gynaecologist but to the principal investigators. Nonetheless, this approach does not quite adhere to the according guidelines [27], and therefore it must be recognised that women's safety may have been insufficiently ascertained.

Finally, another potential source of bias is that we were not directly involved in the recruitment of patients, and hence we had no means of ascertaining that gynaecologists from the participating centres invited their patients to participate in the study in a systematic and unbiased manner.

In conclusion, we found that in this highly medicalised society, women experiencing partner violence rarely disclose abuse to the widely available health care services, unless they are directly asked about it, which appears to be an acceptable practice. Hence, there is a definite need to improve women's awareness regarding abuse and their help-seeking behaviour at a public health level.

Competing interests

We declare that we have no competing interests.

Acknowledgements

This work was supported by a research grant from the Province of East Flanders, Belgium and from the Flemish College of Obstetricians and Gynaecologists. We thank the gynaecologists of the Ghent University Hospital, of the Hospital 'Maria Middelaers' in Ghent, of the Hospital 'St. Lucas' in Ghent, of the Hospital 'Aurora' in Oudenaarde and of the Hospital 'Maria Middelaers' in Sint-Niklaas for their collaboration.

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